

CLAIM AMENDMENTS

1. (Currently amended) An electronic fuel injector comprising a movable part having a valve member provided at a fore end of said movable part, and a swirler for swirling fuel and guiding movement of said valve member provided at the fore end of said movable part,

wherein said valve member is made of SUS440C,

wherein said swirler is formed of a powder sintered compact of stainless steel having corrosion resistance and wear resistance,

wherein martensitic stainless steel, ferritic stainless steel, or austenitic stainless steel including SUS410, SUS410L, and SUS440C is used as a material of said swirler formed of a powder sintered compact, and

wherein said swirler formed of a powder sintered compact has a hardness which is smaller than a hardness of said valve member and which is not less than 90 HRB after sintering.

2-3. (Canceled)

4. (Previously presented) An electronic fuel injector according to Claim 1, wherein said swirler formed of a powder sintered compact has a density which is not less than 6.5 after sintering.

5. (Previously presented) An electronic fuel injector comprising a movable part having a valve member provided at a fore end of said movable part, and a swirler for swirling fuel and guiding movement of said valve member provided at the fore end of said movable part,

wherein said swirler is formed of a powder sintered compact of stainless steel having corrosion resistance and wear resistance, and

wherein a hardness of said swirler is smaller than hardness of said valve member.

6. (Previously presented) An electronic fuel injector according to Claim 5, wherein martensitic stainless steel is used as a material of said swirler formed of a powder sintered compact.

7. (Previously presented) An electronic fuel injector according to Claim 5, wherein said swirler formed of a powder sintered compact has a hardness not less than 90 HRB after sintering.

8. (Previously presented) An electronic fuel injector according to Claim 5, wherein said swirler formed of a powder sintered compact has a density not less than 6.5 after sintering.

9. (Previously presented) An electronic fuel injector according to Claim 5, wherein said swirler is spherical.

10. (Previously presented) An electronic fuel injector according to Claim 5, wherein a wear depth of said swirler is less than 0.7 μm .

11. (Previously presented) An electronic fuel injector according to Claim 5, wherein fuel tightness of said swirler is 0.15 to 0.8 mm^3/min .

12. (Previously presented) An electronic fuel injector comprising a movable part having a valve member provided at a fore end of said movable part, and a swirler for swirling fuel and guiding movement of said valve member provided at the fore end of said movable part,

wherein said swirler is formed of a powder sintered compact of stainless steel having corrosion resistance and wear resistance, and

wherein said swirler wears and said valve member does not wear when said valve member contacts with said swirler by operation of said movable part.

13. (Previously presented) An electronic fuel injector according to Claim 12, wherein martensitic stainless steel is used as a material of said swirler formed of a powder sintered compact.

14. (Previously presented) An electronic fuel injector according to Claim 12, wherein said swirler formed of a powder sintered compact has a hardness not less than 90 HRB after sintering.

15. (Previously presented) An electronic fuel injector according to Claim 12, wherein said swirler formed of a powder sintered compact has a density not less than 6.5 after sintering.

16. (Previously presented) An electronic fuel injector according to Claim 12, wherein said swirler is spherical.

17. (Previously presented) An electronic fuel injector according to Claim 12, wherein a hardness of said swirler is smaller than a hardness of said valve member.

18. (Previously presented) An electronic fuel injector according to Claim 12, wherein a wear depth of said swirler is less than 0.7 μm .

19. (Previously presented) An electronic fuel injector according to Claim 12, wherein fuel tightness of said swirler is 0.15 to 0.8 mm^3/min .